

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method of manufacturing a porous thick film having an electrical conductivity of at least 10^{-3} S/m at 800°C, the method comprising:
heat treating a raw material powder comprising a fine particle powder of an oxide comprising cerium oxide to affect particle growth from the average particle diameter of the raw material powder to a particle diameter less than the average particle diameter of the porous thick film, thereby obtaining a particle growth-affected powder wherein the particles have necks produced between the particles thereby forming a porous body which is electrically conductive;

mixing the particle growth-affected powder with a solvent;
dispersing agglomerated particles of the particle growth-affected powder in the solvent;
removing a precipitate of the dispersion;
evaporating off the solvent of the dispersion and thereby obtaining a resulting oxide;
mixing the resulting oxide with an organic binder to obtain a paste;
printing the paste onto a substrate by screen printing;
calcining the printed substrate; and
sintering the calcined substrate.

Claim 2 (Original): The method according to claim 1, wherein the average particle diameter of the porous thick film is not more than 200 nm.

Claim 3 (Previously Presented): The method according to claim 1, wherein the average particle diameter of the particle growth-affected powder obtained through the heat treatment step is at least 45 nm.

Claim 4 (Original): The method according to claim 1, wherein the average particle diameter of the raw material powder before the heat treatment step is at least 10 nm but less than 45 nm.

Claim 5 (Original): The method according to claim 1, wherein the raw material powder is subjected to heat treatment at 880°C to 920°C in the heat treatment step.

Claim 6 (Original): The method according to claim 1, wherein the proportion by weight of the oxide in the paste is adjusted to 10 to 30 wt%.

Claim 7 (Original): The method according to claim 1, wherein the fine particle powder of an oxide containing cerium oxide is a fine particle powder of an oxide containing cerium oxide and zirconium oxide.

Claim 8 (Withdrawn): A porous thick film manufactured using the method according to any of claims 1 through 7, whereby the porous thick film has few cracks, has an average particle diameter of not more than 200 nm, and has an electrical conductivity of at least 10^{-3} S/m at 800°C.